

PROJECT SUMMARY (See instructions):

The Northwest Center for Occupational Health and Safety is a multidisciplinary training program located at the University of Washington, dedicated to the prevention of work-related injury and illness. The Center is administered through the Department of Environmental and Occupational Health Sciences (DEOHS) of the UW School of Public Health and includes program elements in the Schools of Nursing and Medicine. The primary focus of the Center is graduate student training with a strong emphasis in research-based education. In addition, the Center serves as a regional resource for continuing education and other outreach activities to health and safety practitioners in the region.

The NWCOHS programmatic activities include Center-Wide Activities, the three core academic programs (Industrial Hygiene, Occupational Health Nursing, and Occupational Medical Residency), one allied academic program (Occupational Health Services Research), and a Continuing Education program.

RELEVANCE (See instructions):

The NWCOHS provides research-based training and continuing education for professional disciplines in recognition, control and management of occupational health and safety risks. Our graduates form a key workforce for prevention of work-related injury and illness.

## KEY PERSONNEL

Name	Role on Project	Contact Information
Kalman, David A.	ERC Center Director	<a href="mailto:dkalman@uw.edu">dkalman@uw.edu</a> 206-543-1048
Camp, Janice	CE Program Director	<a href="mailto:jecamp@uw.edu">jecamp@uw.edu</a> 206-616-3039
Cherry, Debra	OMR Program Co-Director	<a href="mailto:cherryd@uw.edu">cherryd@uw.edu</a> 206-744-9398
de Castro, Arnold (Butch)	ERC Deputy Director OHN Program Director	<a href="mailto:BdeCastro@uwb.edu">BdeCastro@uwb.edu</a> 425-352-3590
Franklin, Gary	OHSR Program Co-Director	<a href="mailto:meddir@uw.edu">meddir@uw.edu</a> 206-685-7193
Kaufman, Joel	OMR Program Director	<a href="mailto:joelk@uw.edu">joelk@uw.edu</a> 206-616-3501
Sears, Jeanne	OHSR Program Director	<a href="mailto:jeannes@uw.edu">jeannes@uw.edu</a> 206-543-1360
Simpson, Christopher	IH-ES Program Director	<a href="mailto:simpson1@uw.edu">simpson1@uw.edu</a> 206-543-3222
Tsai, Jenny Hsin-Chun	OHN Co-Director	<a href="mailto:jennyt@uw.edu">jennyt@uw.edu</a> 206-543-6079
Yost, Michael	ERC Associate Director	<a href="mailto:airion@uw.edu">airion@uw.edu</a> 206-543-6991

## WEBSITE

<http://depts.washington.edu/nwcohs/> (redesign in progress)



## **NORTHWEST CENTER FOR OCCUPATIONAL HEALTH AND SAFETY**

### **University of Washington**

Program Highlights for July 1, 2013 – June 30, 2014

#### **Center Wide Activities (CWA)**

The Future of Occupational Health project was launched in 2014, aimed at exploring the pressures and changes affecting the field of occupational health and discussing strategies for the future research and training. Working with Dr. Noah Seixas and Dr. Joel Kaufman, the NWCOHS is helping to coordinate and communicate about a DEOHS-wide monthly speaker series on this topic, culminating in a two-day Symposium in June 2015. We will reach out to include national, regional, and local thought leaders, practitioners, and students to participate in these events. It is hoped that the interactions and discussions stimulated by this endeavor will help provide guidance for OH&S research needs and training approaches over the next 10 to 20 years. Even more directly, we anticipate this endeavor will help the NWCOHS identify opportunities for its Health and Safety Pilot Project to foster new health and safety research, training, and interdisciplinary collaboration in the Region.

#### **Industrial Hygiene / Exposure Sciences (IH-ES)**

- The ES program currently includes 28 students, 14 in the MS program and 14 in the Doctoral program. 6 new MS students and 5 new Doctoral students were admitted to the 2014-2015 year class.
- Recruiting was highly effective: we enrolled a full class in the Exposure Sciences program, with most students choosing to pursue the Occupational Hygiene emphasis.
- 15 new external grants were awarded to program faculty in the 2013-14 academic year, totaling over \$2.2 million.
- 7 peer-reviewed articles by IH-ES trainees

#### Recognition for Program faculty

- Dr. Simpson, director of the IH program was appointed to for a four year term to the Safety and Occupational Health Study Section
- Dr. Richard Fenske was elected President of the International Society of Exposure Science for 2013-2014.
- After a national search, Dr Michael Yost was appointed Chair of DEOHS in 2013. Dr Yost also leads Sustainable Technologies, Alternate Chemistry-Training and Education Center (the STAC-TEC) – one of only three NIEHS training programs in the country developed specifically to addresses the occupational and safety training needs for workers involved with emerging technologies and novel materials.

#### Student recognition

- Cynn timer Curl (PhD) was named the Magnusson scholar for the UW School of Public Health in 2013/14. Scholars are selected based on their academic excellence and their potential contributions to research in the Health Sciences. Curl is investigating the relationship between dietary exposure to pesticides and cognitive health. She recently completed her

PhD program and has been hired as an Assistant Professor in the Environmental and Occupational Health program at Boise State University.

- Tania Busch-Isaksen (PhD) received the award for outstanding PhD student in DEOHS in 2014. In her PhD research Tania investigated the association between extreme-heat exposure and adverse health outcomes in King County, WA. Tania is now working as a research scientist in DEOHS developing curricula and training materials specifically to addresses the occupational and safety training needs for workers involved with emerging technologies and novel materials.
- Nazila Shakibaei received an academic scholarship from the Pacific Northwest Section of the American Industrial Hygiene Association in October 2013. Nazila worked on a project that evaluated use of local exhaust ventilation systems to reduce workers' exposures to chemicals and dust in nail salons.
- Boris Reiss (PhD) was selected to participate in the American Industrial Hygiene Association's 2014 Future Leaders Program. He will attend a FLI training offered at the AIHA fall conference in 2014.

#### Faculty Participation

The IH program consist of 13 core faculty (5 professors, 5 associate professors, 1 assistant professor, two lecturers) and 15 affiliate faculty. There have been several significant changes to program faculty during the reporting period. Senior faculty Michael Morgan and Janice Camp retired from the University of Washington. Four new faculty joined the program: Lianne Sheppard (Professor: expertise in include Air pollution health effects and occupational epidemiological studies, estimation of health effects from environmental and occupational exposures, statistical methods for exposure science); Kris Ebi (Professor: expertise in global health); Edmund Seto (Associate Professor: expertise in sensor development, and Gretchen Onstad (Acting Assistant Professor: expertise in water quality). In addition we have added affiliate faculty with expertise in fishing safety (Jennifer Lincoln); Radiation Protection (Phil Campbell) and Global Occupational Health (Anne Reiderer).

#### **Occupational Health Nursing (OHN)**

- From July 2013 to June 2014, a total of 1 PhD trainee (non-ERC supported), 3 Master of Nursing (MN) OHN administrator trainees (1 supported with ERC traineeship), and 2 Master of Public Health (MPH) trainees (both supported with ERC traineeship) participated in the OHN Program. An additional 2 PhD trainees were successfully recruited and will be matriculating in September 2014.
- Responding to stakeholder input and anticipated phase out of the MN degree, a new MPH degree option for OHN trainees was approved by the UW School of Public Health's Department of Environmental and Occupational Health Sciences, and was accepted by CDC-NIOSH for the purposes of supporting traineeships with ERC funding. The first cohort of two MPH trainees (Stella Daniels and Margaret Willis) was admitted for the 2013-2014 academic year, and 1 trainee (Jane Vaccaro) was admitted for the 2014-15 academic year.
- PhD trainee alumni landed academic positions at major universities. Dr. Susan L. Johnson (2008-2013) was hired as an Assistant Professor at the UW Tacoma Nursing program starting with the 2013-2014 academic year; Dr. Marie-Anne Sanon (2008-2012) was accepted into a research fellowship at the University of Michigan School of Nursing; and, Dr. Susan Matt (2004-2008), hired as an Assistant Professor at the Seattle University College of Nursing in September 2008, was promoted to Associate Professor with tenure and is currently serving as a Department Chair there.

- OHN Program faculty continue to be recognized for their scholarship and leadership in the field. Dr. Salazar, previous OHN Program Director, delivered the prestigious Catherine Dempsey Lecture at the 2014 National Conference of the American Association of Occupational Health Nurses (AAOHN) held in Dallas, TX. Also for the 2014 AAOHN National Conference, Dr. de Castro convened a panel of international OHN leaders from Asian countries (Japan, Philippines, and Thailand) as part of the conference's Global Summit.

### **Occupational Medical Residency (OMR)**

The faculty continues to grow. Debra Cherry, MD, MS, joined the faculty from the University of Texas (UT) in September 2013 and now directs the residency program. Dr. Cherry was a faculty member in the UTHSC Tyler Occupational Medicine Residency program for 13 years, where she was the principal investigator on several projects, including a CDC Community Transformation Grant, a National Children's Study location, and a regional branch of the Texas Cancer Registry. She was chair of Tyler's Occupational Medicine Residency Advisory Committee, mentor for many resident research projects, and "Teacher of the Year" for 3 years.

Peter Rabinowitz, MD, MPH, also joined the UW OEM faculty in September 2013. Dr. Rabinowitz was recruited from Yale and now directs the human animal medicine project. He is a guest lecturer in the OEM MPH program and mentor for OEM trainees.

Our program continues to recruit highly qualified trainees. Ann Tu, a physician trained in surgery and general preventive medicine at Stony Brook, and Will Cann, trained in family medicine and general preventive medicine through the Air Force, joined the program in July 2014. Trainees Hee Yon Sohng and Carly Miller began their second year of training in July and September 2013, respectively. Shilpa Gowda, a physician who completed her undergraduate and medical school degrees at Brown University, will start the OEM program in September 2014.

A new website devoted to the OEM training program was developed in Spring 2014 and launched in Summer 2014. The website is administratively located in the "general internal medicine" domain at <https://depts.washington.edu/gim/fellowships/oemp> and will be linked to the ERC website in the future.

The OEM program has great strength in its practicum offerings, with multiple prevention-oriented, clinically relevant experiences in Occupational Medicine settings. Practicum rotations at the Boeing Company, Washington Department of L&I, and the Veterans Administration of Puget Sound Post-Deployment Clinic are well established. A new rotation at the King County Public Health Department was established in Summer 2014, and a new practicum agreement is in process with the Washington Poison Center as of September 2014.

### **Occupational Health Services Research (OHSR)**

OHSR trainee Laura Blonar successfully competed for a University of Washington Institute of Translational Health Sciences predoctoral fellowship, to begin Fall 2014. Laura Blonar attended the UW/UBC/SFU/UVIC Annual Symposium on Environmental, Occupational, and Public Health in January 2014, and gave a talk titled "Using injury severity to improve occupational traumatic injury trend estimates" (PI: Jeanne Sears). She also gave an invited oral presentation titled "Motorcyclist Head Injuries in Association with Helmet Use" at the 2013 SAVIR/SafeStates

conference and 2013 King County Medical Examiners Ongoing Education Series conferences.

Former OHSR trainee Megan Shepherd-Banigan (PhD in 2014) was chosen as a 2013 American Public Health Association (APHA) MCH (Maternal and Child Health) Section Outstanding Student Author for her article “Paid Leave Benefits Among a National Sample of Working Mothers with Infants in the United States,” written with Dr. Janice Bell and published in *Maternal Child Health Journal*. Megan also received the 2013 Maternal and Child Health Leadership Program Dissertation Award (UW).

OHSR Director Jeanne Sears is currently studying the importance of adding injury severity estimation to existing injury surveillance methodology. This research has resulted in approval from the Council for State and Territorial Epidemiologists (CSTE) to develop a new state-based Occupational Health Indicator for surveillance purposes. Dr. Sears (PhD in 2007), Research Associate Professor of Health Services at the University of Washington, is a former OHSR trainee who now serves as Director of the OHSR training program.

OHSR Co-Director Gary Franklin, Medical Director of the Washington Department of Labor and Industries (L&I), has led the successful effort to expand the Centers of Occupational Health and Education (COHEs) from their inception as small pilot projects through statewide implementation. The community-based COHEs improve injured worker outcomes and reduce disability by training providers, facilitating case coordination, and promoting occupational health best practices. Dr. Franklin received the 2013 Warren Featherstone Reid Award for Excellence in Health Care for Washington State.

### **Continuing Education (CE)**

CE featured several programs that brought together interdisciplinary health and safety professionals. There were 1,469 trainees engaged in classroom and online CE courses between July 1, 2013 and June 30, 2014. Of these 969 trainees participated in-person, hybrid and synchronous course. Highlights included the following:

- The Washington Governor’s Industrial Safety Conference Pre-Conference Symposium: “*Communication Techniques for Effective Safety Programs*”. The conference featured Gary Phillip, expert and author of ‘The Art of Safety’. This conference attracted 90 regional occupational health practitioners, regulators, front line workers, and union representatives from of an array of public and private organizations.
- The Pacific Northwest Section of the American Industrial Hygiene Association’s short course on ‘*Biomarkers and Workplace Exposures: implications for occupational health and safety practitioners*’ provided a better understanding of current trends associated with biomarkers in the workplace, including how biomonitoring can be useful for early detection of disease that may prevent illnesses.
- The CE program worked with the Northwest Association of Occupational and Environmental Medicine to provide three speakers on best practices in returning injured workers to the workplace for Occupational & Environmental Medicine physicians at their annual meeting.
- A one-day short course on *Construction Site Logistics* was provided to help construction project managers, trucking companies, labor supervisors, and occupational health and

safety practitioners learn about best practices for construction projects in dense and congested urban environments.

- A one-day short course entitled, “*Health and Safety Trainers’ Exchange*” provided skill building and new health and safety training methods to enhance health and safety knowledge, hazard recognition, and skills among union members and help reduce workplace injuries.
- A short course in collaboration with NWHELP and WBBA entitled “*Best Practices for Sustainable Laboratories*” shared best practices for achieving sustainability in laboratories including improving the selection, evaluation, and use of chemicals to reduce worker exposures.

During July 2013-July 2014, our director and outreach manager attended national meetings, state regional conferences (WA, OR, AK and ID), as well as many local and regional meetings to increase awareness and understanding of occupational safety and health issues and the activities of the Northwest Center for Occupational Health and Safety. Our partnerships are diverse and include labor unions, governmental agencies, professional associations, regional business, and non-governmental organizations. Particularly noteworthy partners include the Washington State Safe Patient Handling Steering Committee, Puget Sound Ergonomics Roundtable, Washington Women in Trades, Northwest Health, Safety, Environmental and Laboratory Professionals (HELP) group, Washington Department of Labor and Industries, Northwest Association of Occupational and Environmental Medicine (NAOEM), Washington State Association of Occupational Health Nurses (WAOHN), Washington State Nurses Association (WSNA), local chapters of the Association of Safety Engineers (ASSE), the Oregon Coalition on Health Care Ergonomics, Boise Safety Fest, Region X VPPPA, Washington State Labor Council; Evergreen Safety Council; Washington Fire Chiefs Association; Pacific Northwest Section-AIHA; and Northwest Laborers/Employers Training Trust Fund. In addition, CE hosted its first professional development course at the 10<sup>th</sup> Agricultural Annual Washington State Agriculture Safety Day, entitled “Process Safety Management: Ammonia.” We also participated in the planning of the PNS-AIHA Spring Symposium (theme: Role of Industrial Hygienist in Emergency Response), and provided support to bring speakers from CDC-Office of Public Health Preparedness and Response and UW Occupational Medicine. Collaborations with all of these institutions have extended the NWCOHS’s circle of influence and partners, and in the process yielded guidance on new professional development offerings.